Attorney's Docket No. 5470-220CTXX PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Johnston et al.
Serial No.: To be assigned
Filed: Concurrently herewith
For: *ALPHAVIRUS RNA REPLICON SYSTEMS*

Date: October 10, 2003

Mail Stop PATENT APPLICATION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
CITATION UNDER 37 C.F.R. § 1.97

Sir:

Attached is a list of documents on form PTO-1449. With the exception of Items 31 and 41, Items 1-50 were cited in the U.S. parent application Serial Number 09/620,311, filed July 20, 2000. Copies of Items 31 and 41 are enclosed. Since the benefit of this application is claimed under 35 U.S.C. §120, no other copies need to be furnished in accordance with 37 C.F.R. §1.98(d); however, copies will be furnished on request. It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. §1.97 and Section 609 of the MPEP.

Respectfully submitted,

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.FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)	Attorney Docket Number 5470-220CTXX	Serial No. To be assigned
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	Filing Date Concurrently herewith	Group Unknown

U. S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	4,650,764	03/17/87	Temin et al.			
	2.	5,091,309	02/25/92	Schlesinger et al.			
	3.	5,185,440	02/09/93	Davis et al.			
	4.	5,217,879	06/08/93	Huang et al.			
	5.	5,505,947	04/09/96	Johnston et al.			
	6.	5,639,650	06/17/97	Johnston et al.			
	7.	5,643,576	07/01/97	Johnston et al.			
	8.	5,739,026	04/14/98	Garoff et al.	435	320.1	
	9.	5,766,602	1/2000	Xiong et al.	424	218.1	
	10.	5,789,245	04/04/98	Dubensky et al.	435	320.1	
	11.	5,792,462	08/11/98	Johnston et al.	424	199.1	
	12.	5,814,482	09/29/98	Dubensky, Jr. et al.	435	69.3	10/30/96
	13.	5,843,723	12/01/98	Dubensky, Jr. et al.	435	69.3	10/30/96
	14.	6,015,694	1/2000	Dubensky et al.	435	69.3	
	15.	6,190,666 B1	02/20/01	Garoff et al.	424	208.1	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes | No
	16.	WO 92/10578	6/25/92	WIPO			
	17.	WO 95/07994	3/23/95	WIPO			
	18.	WO 95/27044	10/12/95	WIPO			
	19.	WO 95/31565	11/23/95	WIPO			

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	20.	WO 96/17072	06/06/96	WIPO			
	21.	WO 96/37220	11/28/96	WIPO	A61K	39/12	X
	22.	WO 96/37616	11/28/96	WIPO			
	23.	WO 00/39318	07/06/00	WIPO	C12N	15/86	X

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	24.	Barbara G. Weiss and Sondra Schlesinger. "Recombination between Sindbis Virus RNAs." *Journal of Virology*. Vol. 65, No. 8 (August 1991), 4017-4025.
	25.	Bredenbeek et al, *Sindbis Virus Expression Vectors: Packaging of RNA Replicons by Using Defective Helper RNAs*, Journal of Virology **67** No. 11, pp. 6439-6446 (1993).
	26.	Cheng Xiong, et al. "Sindbis Virus: An Efficient, Broad Host Range Vector for Gene Expression in Animal Cells." *Science,* New Series, Vol. 243, Issue 4895 (March 3, 1989), 1188-1191.
	27.	Corsini, et al.: *Efficiency of Transduction by Recombinant Sindbis Replicon Virus Varies Among Cell Lines, Including Mosquito Cells and Rat Sensory Neurons*, BioTechniques, **21**:3 (492-497), September 1996.
	28.	Davis et al, *A Genetically Engineered Live Virus Vaccine for Venezuelan Equine Encephalitis*; J. Cell Biochemistry Supplement O No. 17 Part D, issued 1993, Abstract N404.
	29.	Davis et al, *Attenuated Mutants of Venezuelan Equine Encephalitis Virus Containing Lethal Mutations in the PE2 Cleavage Signal Combined with a Second-Site Suppressor Mutation in E1,* Virology 212:102-110 (1995).
	30.	Davis et al., *Attenuating Mutations in the E2 Glycoprotein Gene of Venezuelan Equine Encephalitis Virus: Construction of Single and Multiple Mutants in a Full-Length cDNA Clone,* Virology **183** 20-31 (1991).
	31.	Dubensky et al., "Sindbis virus DNA-Based Expression Vecotrs: Utility for In Vitro and In Vivo Gene Transfer," *Journal of Virology* **70**(1): 508-519 (Jan. 1996).
	32.	E. Mathilda Sjöberg, et al. "A Significantly Improved Semliki Forest Virus Expression System Based on Translation Enhancer Segments from the Viral Capsid Gene." *Bio/Technology*. Vol. 12, (November 1994), 1127-1131.
	33.	Frolov et al., *Alphavirus-based expression vectors: Stategies and applications*, Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 11371-11377 (1996).
	34.	Grieder et al., *Specific Restrictions in the Progression of Venezuelan Equine Encephalitis Virus-Induced Disease Resulting from Single AminoAcid Changes in the Glycoproteins*, Virology, **206**, pp. 994-1006 (1995).

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	35.	J.M. Polo and R.E. Johnston, *Attenuating Mutations in Glycoproteins E1 and E2 of Sindbis Virus Produce a Highly Attenuated Strain When Combined in Vitro*, Journal of Virology **64** No. 9, pp. 4438-4444 (1990).
	36.	Lemm et al., *Polypeptide requirements for assembly of functional Sindbis virus replication complexes: a model for the temporal regulation of minus- and plus-strand RNA synthesis*, The EmBO Journal, Vol. 13, No. 12, pp. 2925-2934 (1994).
	37.	Liljestrom et al., *A New Generation of Animal Cell Expression Vectors Based on the Semliki Forest Virus Replicon,* Bio/Technology, Vol. 9, December 1991, pp. 1356-1361.
	38.	Morgenstein et al, *Advanced mammalian gene transfer: high titre retroviral vectors with multiple drug selection markers and a complementary helper-free packaging cell line,* Nucleic Acids Research **18**:No. 12, pp. 3587-3596 (1990).
	39.	N.L. Davis. "A molecular genetic approach to the study of Venezuelan equine encephalitis virus pathogenesis." *Archives of Virology.* (1994), 99-109.
	40.	Peter Liljeström. "Alphavirus expression systems." *Current Opinion in Biotechnology.* Vol. 5, No. 5, (October 1994), 495-500.
	41.	"Program and Abstracts of the Joint Annual Meeting of the American Society of Tropical Medicine and Hygiene and the American Society of Parasitologists," *Supplement to the American Journal of Tropical Medicine and Hygiene* **49**(3): 1993.
	42.	R.J. Schoepp and R.E. Johnston, *Directed Mutagenesis of a Sindbis Virus Pathogenesis Site*; Virology **193**, pp. 149-159 (1993).
	43.	Richard M. Kinney. "Attenuation of Venzuelan Equine Encephalitis Virus Strain TC-83 Is Encoded by the 5'-Noncoding Region and the E2 Envelope Glycoprotein." *Journal of Virology.* Vol. 67, No. 3, (March 1993), 1269-1277.
	44.	Russell et al., *Sindbis Virus Mutations Which Coordinately Affect Glycoprotein Processing, Penetration, and Virulence in Mice*, Journal of Virology, Vol. 63, No. 4, April 1989, pp. 1619-1629.
	45.	S. Schlesinger and B.G. Weiss. "Recombination between Sindbis virus RNAs." *Archives of Virology.* Suppl. 9, (1994), 213-220.
	46.	Simpson, et al., *Complete Nucleotide Sequence and Full-Length cDNA Clone of S.A.AR86, a South African Alphavirus Related to Sindbis*[1], Virology **222** (464-469) Article No. 0445, 1996.

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	47.	Sondra Schlesinger. "Alphaviruses - vectors for the expression of heterologous genes." *TiBTech.* (1993), 18-22.
	48.	Strauss et al., *The Alphaviruses: Gene Expression, Replication, and Evolution*, Microbiological Reviews, September 1994, pp. 491-562.
	49.	Suomalainen et al., *Spike Protein-Nucleocapsid Interactions Drive the Budding of Alphaviruses*, J. Virology, Vol. 66, No. 8, pp. 4737-4747 (1992).
	50.	Ute Geigenmuller-Gnirke, et al. "Complementation Between Sindbis Viral RNAs Produces Infectious Particles with a Bipartite Genome." *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 88, Issue 8 (April 15, 1991), 3253-3257.

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